

REMARKS

Please note that new attorneys have taken over prosecution of this application, a revocation and new power of attorney having been filed on October 18, 2006. Attached is a duplicate copy of such revocation and new power of attorney. Please change the PTO records of the attorney docket number of the previous attorney to the docket number of the new attorneys of record, namely "PIPKO=2".

The final Official Action of June 27, 2006, and the prior art relied upon therein have been carefully studied. Upon entry of the present application, the claims in the application will be new main claim 22 and dependent claims 12-15, 17 and 19-21. Applicants believe and submit that these claims define patentable subject matter and consequently should be allowed. Applicants also believe that new main claim 22 is based largely on previously claimed subject matter, and therefore should not create any new issues, whereby the present amendment should be entered, at least for purposes of appeal. Applicants respectfully request favorable reconsideration, entry of the amendments presented above, and allowance.

Acknowledgement by the PTO, in the first Office Action on the merits mailed December 16, 2005, of applicants' papers filed under Section 119 is noted.

The examiner has helpfully pointed out certain informalities in the claims. Most of these are addressed by the replacement of claim 11 with new claim 22. The typographical errors in claims 19 and 21 are corrected above. Withdrawal of the objection is in order and is respectfully requested.

Claims 11-15 and 17-21 have been rejected under the first paragraph of §112 as allegedly not conforming to the original description of the invention. The rejection is respectfully traversed.

The title of the present application as filed, and the very first sentence of the present application describe applicants' invention as a fungicidal composition containing tea tree oil, which is an emulsion, and which is adapted for the control of a wide range of fungal plant pathogens. Also see the first paragraph under the heading "Summary of the Invention" at page 2, which additionally points out that the emulsifier is a reaction product of a high molecular weight organic fatty acid and an alkali or ammonium compound, such a reaction product inherently constituting a salt (explicit support for "salt" is found at page 5, lines 4-8, and elsewhere). That the present invention is for use in the treatment of agricultural crops is quite implicit from applicants' specification and especially Table 1 on page 6 which provides more explicit support, as well as the first sentence on page 7, and the first sentence of example 6.

The water-in-oil feature of the emulsion was mentioned several times in the description for the example Paragraph §14 mentions that *"The term `emulsion` is referring hereinafter to any water in oil (W/O); oil in water (O(W); W/O/W and/or O/W/O phases comprising the TTO inside, outside or at the surface of aggregates, vesicles, micelles, reversed micelles, nano-emulsions, micro-emulsion, liposomes or in any combination thereof. "* Furthermore in paragraph 16 *"the terms `water` and/or `water solution` are specifically referring hereinafter to water or water solutions, and more generally to any natural or purified, distilled, filtered, de-ionized waters, water suspensions, water-miscible solvents or diluents, water miscible aqueous phase or water-miscible emulsion or any combination thereof"* and also in paragraph 27 *"according to yet another embodiment of the present invention, the emulsion is prepared by admixing a water solution comprising alkali hydroxide, carbonate or bicarbonate with a liquid solution of organic acid, subsequently admixing a TTO or a TTO-etheric acid mixture. Said admixing step is provided in the manner homogeneous composition is obtained."*

Moreover, the water concentration of the claimed composition is in the range of about 5% to about 20%(w/w) of the total emulsion, more specifically the water concentration according to example 1 is 14% (w/w) of the total emulsion, according to example 2 is 16%, according to example 3 is 13%,

according to example 4 is 7.6%, and according to example 5 is 13%.

Moreover, treatment by TTO-containing emulsions is disclosed in the description, particularly in tables 2-5. Tables 2-5 teach about the high concentrated water-in-oil emulsion which generates low concentrated oil-in-water emulsion.

That the claimed fungicidal emulsion is non-phytotoxic is not only unobvious, but is also implicit in applicants' specification. It would not be used in agriculture, applied to plants, which is clearly recited as part of the present invention, if the claimed composition were phytotoxic. Accordingly, it must be non-phytotoxic. The heading to Table 1 on page 6 indicates that applicants' composition is for use in the treatment of crops to kill pathogens, namely fungi. Also see the top paragraph on page 7. Example 6 explicitly states that the emulsions of examples 1-5 "were proved useful for treating the crops against pathogens... ." The bottom example on page 9 explicitly discloses that plants were sprayed with TTO composition according to the present invention.

Applicants have not introduced any new matter, and have not deviated from their original description of their invention. Applicants' claims are in full compliance with the description requirement of the first paragraph of §112.

The rejection seems to indicate that an applicant may not properly revise the wording of his claims. Respectfully,

this is not so. MPEP 2163.07, part I, clearly states that rewording or rephrasing is entirely proper. MPEP 2163.02 explicitly states that the "subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement."

Moreover, the initial burden is on the examiner, noting MPEP 2163.04. "The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims."

As regards the comment at the bottom of page 4 of the Final Action that applicants' claims introduce "new matter", it has been pointed out above that there is no "new matter". MPEP 2163.06 points out that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any part of the application without introducing new matter."

Withdrawal of the rejection is in order and is respectfully requested.

Claims 19 and 21 have been rejected under the second paragraph of §112. The rejection is respectfully traversed.

The examiner's helpful suggestions regarding claim 21 have been noted and an appropriate amendment is submitted above with respect to claim 21.

As regards claim 19, applicants do not really understand why the word "portion" is believed by the PTO to render the claims indefinite. It seems clear to applicants that the fatty acid called for in claim 19 is made of plural portions, namely at least one portion (a), a second at least one portion (b), and at least one third portion (c). Nevertheless, in deference to the examiner's views, claim 19 has been amended above to delete the word "portion".

No change in scope is made or is intended by such amendments.

Withdrawal of the rejection is in order and is respectfully requested.

No other rejections have been imposed under §112, and applicants are proceeding in reliance thereof, with the understanding that the PTO deems applicants' claims otherwise in full conformance with both the first and second paragraphs of §112. Nevertheless, applicants have introduced some additional amendments, e.g. in claim 20, to place applicants' claims in better form for U.S. practice.

Claims 11-13, 17, 19 and 20 have been rejected under §102 as anticipated by Hyldgaard et al U.S. patent 6,342,208 (Hyldgaard). This rejection is respectfully traversed.

The present invention relates to an agricultural, non-phytotoxic, fungicidal aqueous emulsion of tea tree oil (TTO), the emulsifier being a very particular type of emulsifier, namely an alkali or ammonium salt of an organic fatty acid. In contrast, Hyldgaard relates to an oil-in-water emulsion for application to a skin surface, and has nothing to do with agriculture or crops. Applicants' claim preamble cannot be brushed aside as an intended use, but instead defines **what the composition is**, namely it is an agricultural, non-phytotoxic, fungicidal emulsion. The composition of Hyldgaard is not an agricultural emulsion; Hyldgaard does not disclose any agricultural emulsion. For this reason alone, there is no anticipation.

In this regard, it is respectfully noted that the rejection is based on Section 102, anticipation or lack of novelty, and thus obviousness (or non-obviousness) is not an issue in this rejection, i.e. the sole issue is whether or not Hyldgaard discloses the claimed subject matter. The PTO does not and cannot accurately state that Hyldgaard discloses an agricultural emulsion.

With regard to the recitation of an "agricultural... emulsion", the examiner's attention is respectfully invited to In

re *Steppan et al*, 156 USPQ 143, 147. Here, the preamble of claim 25 read as follows:

25. An acid phosphate of a condensation product of

The appellants argued that the expression "condensation product" defined "what the acid phosphate is", and the court reversed the rejection. Also see the somewhat analogous case of *In re Garner*, 162 USPQ 221, 223, where in effect the Court held that the claim language "interbonded one to another by interfusion" defined the structure of the product. See also *In re Bulloch et al*, 203 USPQ 171, 174 (CCPA 1979).

There, there should be no doubt that, as a general rule, all subject matter recited in a claim must be given full weight; and, consequently, any rejection based on anticipation requires that the reference relied upon show each and every feature claimed, in a coherent fashion. A sometimes exception is when the claim preamble only calls for an intended use. The leading case in this area is *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

In *Kropa v. Robie*, the court reviewed thirty seven of its own prior decisions in cases where it had determined whether or not the claim preamble must be given effect. The court stated:

..., in those *ex parte* and interference cases where the preamble to the claim or count was expressly or by necessary implication given the effect of a limitation, the introductory phrase was deemed essential to point out the invention defined by the claim or count.

In the latter class of cases, the preamble was considered necessary to give life, meaning and vitality to the claims or counts. Usually, in those cases, there inhered in the article specified in the preamble a problem which transcended that before prior artisans and the solution of which was not conceived by or known to them. The nature of the problem characterized the elements comprising the article, and recited in the body of the claim or count following the introductory clause, so as to distinguish the claim or count over prior art.

The same situation exists in the present case. Particular problems exists in the environment of the treatment of crops which are made clear in applicants' specification, namely the problem of TTO being phytotoxic to plants, which phytotoxicity problem has nothing to do with the skin treatment taught in *Hyldgaard*.

In other words, using the language of *Kropa v. Robie*, inherent in an agricultural emulsion as recited in claim 22 is the solution of "a problem which transcended that before prior artisans and the solution of which was not conceived by or known to them", namely the problem of using TTO without killing the plant. The introductory clause is therefore "essential to point out the invention defined" by the remainder of applicants' claims.

As further regards the introductory clause of claim 22, which defines what the claimed emulsion is, the examiner may wish to consider some cases which are more recent than *Kropa v. Robie*. Attention is therefore first invited to *Perkin-Elmer v.*

Computervision, 221 USPQ 669, 675 (Fed. Cir. 1984), where the introductory clause of claim 1 called for a "unity magnification

catoptric image-forming system... ." In giving weight to such recitation, the court stated:

The system of claim 1 is one of unity magnification and is image forming. Those limitations appear in the preamble, but are necessary to give meaning to the claim and properly define the invention.
[citations omitted]

In *Loctite v. Ultraseal*, 228 USPQ 90, 91-93, the introductory portion of claim 1 of the '012 patent read as follows:

1. An anaerobic curing sealant composition adapted to remain in a liquid, non- polymerizing state... .

The court stated:

Although it appears in the preambles of the '012 patent claims, the term "anaerobic" breathes life and meaning into the claims and hence is a necessary limitation to them. [citation omitted]

The holdings of the lower court were vacated, and the case was remanded.

Attention is next invited to *In re Stencel*, 4 USPQ2d 1071 (Fed. Cir. 1987) where the introductory clause of claim 1 called in part for a "driver for setting a joint of a threaded collar, ... the collar having plastically deformable lobes on its longitudinal exterior ..., the driver comprising:". In reversing the rejection, the Court stated:

We conclude that it would not have been obvious to [provide the applicant's invention] unless one had in mind the purpose taught by appellant. This purpose, set forth in the claims themselves, "is more than a mere

statement of purpose; and that language is essential to particularly point out the invention defined by the claims." [citations omitted; bracketed material added]

Similarly, in the present case, the purpose of the present invention is not to be found in the prior art; this purpose, set forth in applicants' claims, "is essential to particularly point out the invention defined by the claims".

Lastly, attention is respectfully invited to *Corning Glassworks v. Sumitomo Electric*, 9 USPQ2d 1962, 1965-66 (Fed. Cir. 1989). Here, claim 1 of the '915 patent recited an "optical wave guide comprising... ." The Court stated:

In this case, the question of anticipation turns on claim interpretation, [citation omitted]
If the claims are given Sumitomo's suggested interpretation, the [prior art] patent anticipates [claims 1 and 2 of the '915 patent]; otherwise, it does not. In particular, the dispute focuses on the interpretation and effect of the words "An optical wave guide" in claim 1. [bracketed words added]

Sumitomo argued that the fiber of the prior art patent could "inherently" function as a "waveguide", and therefore the words "An optical waveguide" should be ignored because "the preamble is not a limitation when it merely states a purpose or *intended use* and the remainder of the claim completely defines the invention". (Italics in the court decision)

In affirming the lower court's decision of validity (no anticipation), the Federal Circuit stated in part as follows:

The effect preamble language should be given can be resolved only on review of the entirety of the [disclosure] to gain an understanding of what the inventors actually invented and intended to encompass by the claim. Here, the 915 specification makes clear that the inventors were working on the particular problem of an effective optical communication system not on general improvements in conventional optical fibers. To read the claim in light of the specification indiscriminately to cover all types of optical fibers would be divorced from reality. The invention is restricted to those fibers that work as waveguides as defined in the specification, which is not true with respect to fibers constructed with the limitations of paragraphs (a) and (b) only. Thus, we conclude that the claim preamble in this instance does not merely state a purpose or intended use of the claimed structure [citation omitted]. Rather, those words do give "life and meaning" and provide further positive limitations to the invention claimed [citations omitted]. Thus, contrary to Sumitomo's argument, the core and cladding limitations set out in paragraphs (a) and (b) are not the only limitations of the claim [citation omitted]. The claim requires, in addition, the particular structural relationship defined in the specification for the core and cladding to function as an optical waveguide.

Similarly, the introductory clause of applicants' claim 22 is also a requirement of applicants' invention.

The Federal Circuit in *Corning Glassworks* continued as follows:

Viewed in this manner, the fact that the [prior art] luminescent fiber could inherently transmit information for a few meters becomes irrelevant. The [prior art] patent does not disclose all the limitations of the claimed "optical

waveguide" as that term is structurally defined by the '915 inventors.

The examiner should be guided by the above quoted words of the Federal Circuit from *Corning Glassworks v. Sumitomo Electric*.

Hyldgaard does not anticipate claim 22, and therefore Hyldgaard does not anticipate any of applicants' claims for this reason alone. The rejection should be withdrawn, and such is respectfully requested.

But the recitation of an agricultural emulsion is not the only reason why Hyldgaard does not anticipate applicants' claims. Thus, the anticipation rejection is based on taking bits and pieces from different parts of what is in essence a huge, indeed mammoth, shotgun or basket disclosure of Hyldgaard. There is no coherent disclosure in Hyldgaard bringing together all the disparate features, which might be located here and there in different locations within Hyldgaard, into one composition, e.g. in a working example.

TTO is by no means an important component of any particular Hyldgaard composition, and is not included in any specific example. It is not even mentioned in the huge basket disclosure of vegetable materials mentioned at column 8, lines 14-43, even though it is indeed a vegetable material. Insofar as undersigned can see after a careful review of Hyldgaard, tea tree oil (TTO) is only mentioned once, namely at column 19, lines 39 and 40, in a basket or shotgun disclosure beginning at column 18, line 49, and ending at column 19, line 46, and including at least

156 members. Such a basket or shotgun disclosure does not meet the requirements of anticipation under §102.

Similarly, the disclosure of emulsifiers is also very broad in general, commencing at the bottom of column 8 and extending to near the bottom of column 13. Although a general description of the type of emulsifier used in the present invention is set forth in Hyldgaard at column 10, lines 21-32, undersigned does not see any specific example of applicants' emulsifier in the basket or shotgun disclosure at the top of column 11 or in the basket or shotgun disclosure commencing at the bottom of column 11 and extending through the middle of column 13.

Hyldgaard does not "describe" applicants' invention, and therefore Hyldgaard does not anticipate applicants' claimed invention, even though the basket or shotgun disclosures of Hyldgaard mentioned the components of applicants' invention in different places.

The law regarding whether or not a generic disclosure anticipates is relatively clear. As a special panel of the Board of Appeals (11-member panel) held in *Ex parte Osmond et al*, 191 USPQ 334, 336 (1973):

It may be true, as urged by the Examiner, that ... the polymers may have molecular weights falling within ranges which overlap that recited in the claims, and that the polymers may be present in concentration ranges which overlap that here claimed. These, however, are isolated disclosures with no teaching that there is any inter-relationship among these features. There

is nothing within the patents which would direct a person skilled in the pertinent art to make the selections necessary to formulate a composition having the specific combination of features here claimed. These patents do not disclose or teach the invention here claimed in such manner as to "give possession of the invention to the person of ordinary skill," c.f. *In re Borst* [145 USPQ 554]. In such circumstances, we cannot agree with the Examiner that the compositions defined by the claims are "anticipated", within the meaning of 35 U.S.C. 102, by the disclosure of these patents.

Perhaps the seminal case is *In re Petering*, 133 USPQ 275 (1962), which states at page 279:

Even though Appellants' claimed compounds are encompassed by this broad generic disclosure, we do not think this disclosure by itself describes Appellants' invention ... within the meaning of 35 U.S.C. 102(b). [emphasis in original]

Petering went on to state that the references disclosed a smaller preferred class which did act as a description within the meaning of §102(b). Subsequent to *Petering*, the cases of *In re Ruschig*, 145 USPQ 274 (1965), and *In re Kalm*, 154 USPQ 10 (1967), both held that there was no anticipation in those cases notwithstanding a generic disclosure in the references in question which arguably included or encompassed the subject matter of the claims. The latter case states at page 12:

A rejection under 35 U.S.C. 102(e) for anticipation, such as made by the Patent Office in the present case, necessarily implies that the invention sought to be patented has been "described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent," and therefore is not "new" - that

there are no differences between what is claimed and what is disclosed in the prior art.

It should be absolutely clear that no valid anticipation rejection can be based on Hyldgaard.

In connection with the impropriety of reconstructing the disclosure of patents, attention is invited to *Ex parte Garvey*, 41 USPQ 583 (1939) in which the Board stated:

The likelihood of producing a composition such as here claimed from a disclosure such as shown by the Dykstra patent would be about the same as the likelihood of discovering the combination of a safe from a mere inspection of the dials thereof.

* * *

..., as in the Dykstra et al disclosure, the proper one of large number of possible permutations must be chosen to bring the disclosure within the terms of the claims on appeal. Under such circumstances, we do not feel that the patent is a fair reference.

Thus, to reconstruct applicants' invention from the Hyldgaard disclosure would involve the exercise of the inventive faculty. It is not a fair rejection to reason by hindsight from applicants' disclosure and thereby select various features in Hyldgaard in an endeavor to provide applicants' composition.

Similarly in *Ex parte Reister and Wilmanns*, 58 USPQ 620, 621 (1942), the Board reversed the Examiner, saying:

It is, of course, possible in most cases to find somewhere single references to all various groups and other characteristics of organic compounds which may be involved in a patent claim. We know of no precedent,

however, for picking groups out of unrelated molecular assemblages and tacking them together to anticipate claims when no reference or references suggest the regrouping as a useful feature in a particular type of compound.

* * *

The only way the Examiner can construct the anticipation is by destroying in each instance the identity of the reference compounds and reassembling various groups in the references to constitute the compounds of the appealed claims.

As in the *Garvey* case, the likelihood of providing a composition such as here claimed from a disclosure such as shown in Hyldgaard "would be about the same as the likelihood of discovering the combination of a safe from a mere inspection of the dials thereof". And, as in the *Riester* case, simply because all features may possibly be found at different places in Hyldgaard does not mean that "tacking them together to anticipate claims when no reference or references suggest the regrouping" provides a valid anticipation rejection.

Withdrawal of the rejection is in order and is respectfully requested.

Claims 11-22 have been rejected as obvious under §103 from Hyldgaard in view of Saleh et al USP 6,387,382 (Saleh), the Lawless publication (Lawless) and the patent abstract of the

Morris Ryan publication based on a New Zealand application (Ryan). This rejection is respectfully traversed.¹

Let us start out with the state of the art at the time the present invention was made. Hyldgaard is largely irrelevant for the reasons pointed out above. Lawless at page 169 discusses tea tree oil and points out that it is active against all three varieties of infectious organisms, namely bacteria, fungi and viruses; but the only uses mentioned are for skin care, genital-urinary, immune system, and employment in soaps, toothpaste, deodorants, disinfectants, gargles, germicides, aftershaves and spicy colognes. Clearly, there is not the remotest hint of any agricultural use.

Saleh, like Hyldgaard, relates to preparations for application to the skin; again, there is not the remotest suggestion of any agricultural use. Ryan is primarily concerned with the treatment of animals and livestock, but also mentions crops and plants; while TTO is mentioned, it is only suggested as one component among various other oils including clove bud oil, eucalyptus oil, lavender oil and orange oil. There is no recognition that TTO is effective as an agricultural fungicide by itself.

¹ As regards claim 11-13, 17, 19 and 20, this rejection is inconsistent with the rejection discussed above under §102. A single claim cannot be both anticipated by a reference and yet made obvious by the same reference in combination with other references. If the claim is anticipated, then an obviousness rejection makes no sense. If the claim is obvious from a combination of references, then it is not anticipated by one of those references. In the present case, applicants' claims are neither anticipated nor made obvious by the prior art.

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Taking all these citations together, even assuming *ad arguendo* that it would have been obvious to combine them, would not have led to applicants' claimed invention. The closest art appears to be newly applied Ryan, but it clearly requires the presence of other components. Moreover, none of the citations would have led the person of ordinary skill in the art to select the type of emulsifier which must be used in accordance with the present invention, as claimed.

Withdrawal of the rejection is in order and is respectfully requested.

Applicants believe that all issues raised in the Final Action have been addressed above in a manner favorable to allowance of the present application. Accordingly, applicants respectfully requests favorable reconsideration and formal allowance.

Respectfully submitted,

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